Safety Instructions:
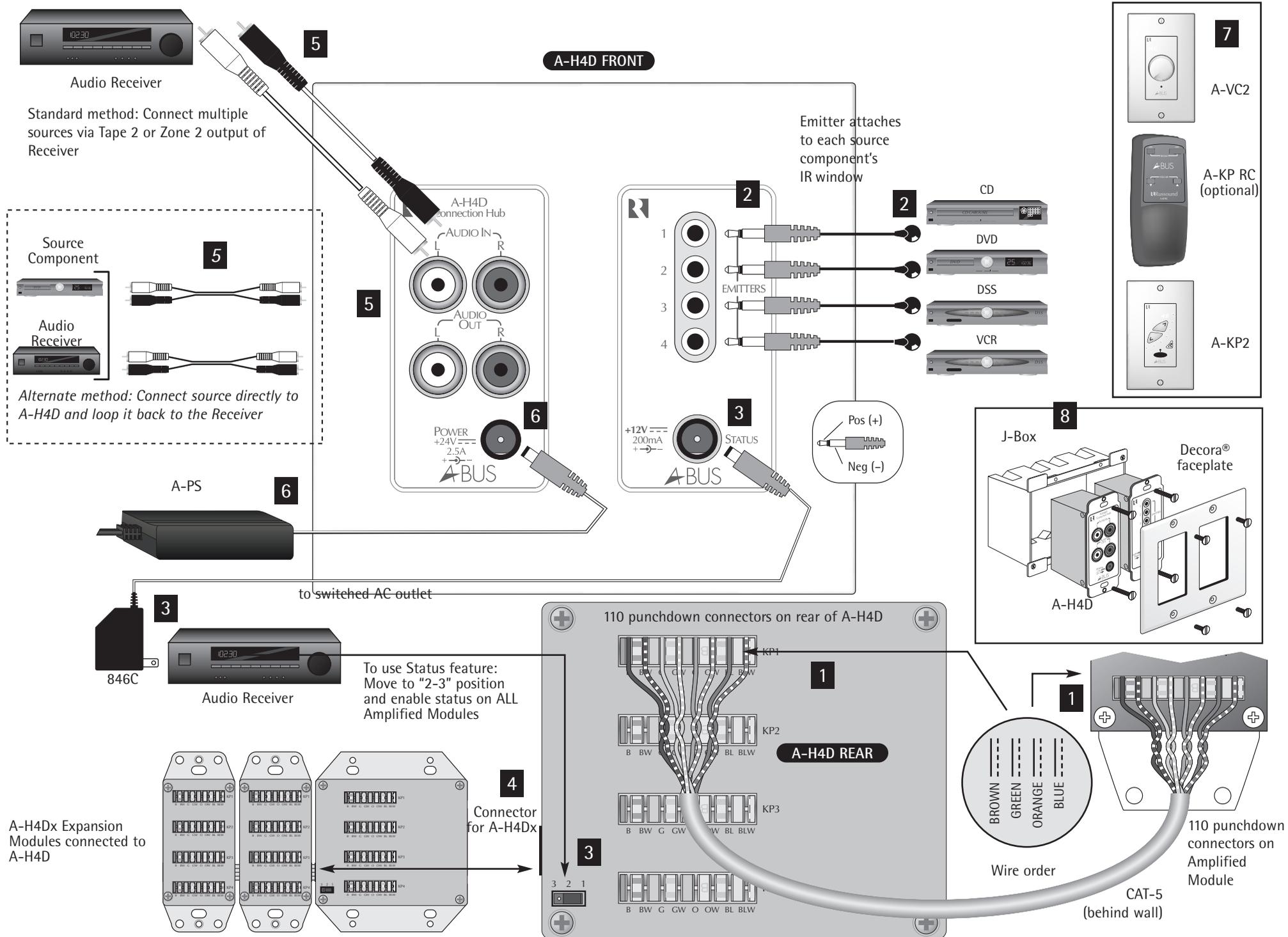
1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.

2. Retain Instructions - The safety and operating instructions should be retained for future reference.

3. Heed Warnings - All warnings on the appliance in the operating instructions should be adhered to.

4. Follow Instructions - All operating and user instructions should be followed.

5. Water and Moisture - The appliance should not be used near water; for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

6. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.

7. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings, or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

8. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

9. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

10. Grounding or Polarization - Precaution should be taken so that the grounding or polarization means of an appliance is not defeated.

11. Power Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, receptacles, and the point where they exit from the appliance.

12. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.

13. Damage Requiring Service - The appliance should be serviced by qualified service personnel when:

    A.   The power supply cord or the plug has been damaged; or

    B.   Objects have fallen, liquid has been spilled into the appliance; or

    C.   The appliance has been exposed to rain; or

    D.   The appliance does not appear to operate normally; or

    E.   The appliance has been dropped or the enclosure is damaged.

14. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Precautions:

1. Power – WARNING: BEFORE TURNING ON THE POWER FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY. All models are designed for use with either AC120V, 60Hz or AC240, 50Hz voltages. The unit will autoswitch to either of these voltages.

2. Do Not Touch The A-H4D With Wet Hands – Do not handle the A-H4D or power cord when your hands are wet or damp. If water or any other liquid enters the A-H4D cabinet, take the A-H4D to a qualified service person for inspection.

3. Care – From time to time you should wipe off the front and side panels of the cabinet with a soft cloth. Do not use rough material, thinners, alcohol or other chemical solvents or cloths since this may damage the finish or remove the panel lettering.

Audio Receiver

Standard method: Connect multiple sources via Tape 2 or Zone 2 output of Receiver

Source Component

Audio Receiver

Alternate method: Connect source directly to A-H4D and loop it back to the Receiver

A-PS

846C

Audio Receiver

A-H4Dx Expansion Modules connected to A-H4D

Connector for A-H4Dx

A-H4D FRONT

Emitter attaches to each source component's IR window

A-H4D Connection Hub

AUDIO IN   L   R

AUDIO OUT   L   R

POWER +24V === 2.5A

EMITTERS   1   2   3   4

+12V === 200mA   STATUS

A-BUS

Pos (+)   Neg (−)

CD   DVD   DSS   VCR

A-VC2

A-KP RC (optional)

A-KP2

J-Box

Decora® faceplate

A-H4D

to switched AC outlet

110 punchdown connectors on rear of A-H4D

To use Status feature: Move to "2-3" position and enable status on ALL Amplified Modules

A-H4D REAR

KP1   B   BW   G   GW   O   OW   BL   BLW

KP2   B   BW   BL   BLW

KP3   B   BW   G   GW   O   OW   BL   BLW

B   BW   G   GW   O   OW   BL   BLW

BROWN   GREEN   ORANGE   BLUE

Wire order

110 punchdown connectors on Amplified Module

CAT-5 (behind wall)

1 AMPLIFIED MODULES

Connect four (4) A-BUS® Amplified Control Modules to the A-H4D Hub using CAT-5 cables. Both the Hub and the Amplified Modules use 110 punchdown connectors for the 8 individual conductors of the CAT-5 cable (use a punchdown tool with a 110 blade to insert the conductors).

2 IR EMITTERS

Common IR Outputs. Connect an IR emitter such as the 845.1 to each of the 4 IR connectors on the front of the A-H4D (you need use only one IR emitter if you've connected a single source directly to the A-H4D). The IR signal that is received through a zone's Amplified Control Module is routed to the A-H4D's Common IR outputs. This allows remote operation of sources such as CD, DVD or DSS from each zone.

3 STATUS

The status feature provides two functions:
- Visually confirms when the source component is on
- When the source component is turned off, all Amplified Modules will also turn off

The status feature requires that the source component has a switched AC outlet.

To enable the status feature:
- Move the status jumper on all Amplified Modules to the "Enabled" position.
- Move the jumper on the A-H4D to the "2-3" position.
- Using a Russound® Model 846C 120V/12VDC or comparable adapter, connect the coaxial plug end to the STATUS input on the Hub, and plug the adapter into a switched AC outlet on the source component.

When the source is on and supplying status voltage to the Hub, the Amplified Keypad Module's LED indicator will illuminate green. When the source is turned off, all Amplified Control Modules that are on will also turn off (the A-VC will mute).

IMPORTANT: When the status feature is enabled, it must be used (i.e., supplied with power) in order to ensure proper operation with accessories such as the A-LC2 Local Source Input Module.

4 A-H4Dx EXPANSION HUB

The A-H4Dx is an Expansion Hub for the A-H4D that provides connectons for 4 additional Amplified Conrol Modules. It plugs into the side of the A-H4D. Multiple A-H4Dx Hubs can be added. Each A-H4Dx requires its own A-PS power supply.

5 SOURCE

Although the A-H4D has only 1 audio input, it can be connected to multiple audio sources via the Tape 2 or Zone 2 output of a stereo or home theater receiver. Connecting to a receiver gives the A-H4D access to any audio source connected to that receiver. If a single audio source is connected directly, it can be shared with the receiver by using the Audio Out on the A-H4D.

6 POWER SUPPLY

The A-H4D Hub and Amplified Control Modules are powered by the A-PS 24VDC/2.5A power supply. The A-PS should be plugged into an unswitched AC outlet (one that is live all the time).

7 OPERATION

A-KP2 keypads can be operated manually or by using the optional A-KP RC remote control. A-VC volume controls are operated manually using the rotary knob. If you installed IR emitters (see Step 2), then sources can be operated with their own remote control by aiming it at the IR window on an A-KP2 keypad.

8 MOUNTING

Install the A-H4D near your receiver and source components. Check all connections and test the system's operation before installing the A-H4D into the wall. Using the included hardware, install the A-H4D into a standard UL/CSA approved electrical J-Box as shown.

A-BUS® SYSTEM OVERVIEW

The product you have just purchased is an integral part of the Russound® A-BUS® Multi-Room Audio System. It is a component which, when combined with other essential components and your source equipment (receiver, CD player, etc.), creates a versatile whole-house audio system that will fill your rooms with high-quality sound for years to come.

A-BUS® technology is a new, innovative method of providing high quality audio to remote locations with a single 8-conductor cable such as CAT-5. A-BUS® technology provides many advantages over other methods of audio distribution, including: simple, single CAT-5 wiring scheme; infrared control of system components; infrared control of the optional A-KP2 amplified keypad module; and system power status.

Every A-BUS® System is comprised of components from each of the following three areas.

1. **A-BUS® Amplified Control Modules**: The Module contains both the amplifier for the room's speakers as well as the control for those speakers. One Module should be used for each room you choose to control. The Russound® A-KP2 Amplified Keypad (with built-in IR receiver) and A-VC Amplified Volume Control are examples of A-BUS® Amplified Control Modules.
2. **A-BUS® Hubs**: All components of the A-BUS® system must be wired centrally to a Hub located near your source equipment. The Hub provides the connection for source equipment, volume controls, infrared emitters and power supply. The A-H484, A-H4, A-H4D, and A-H2 are examples of A-BUS® Hubs. The A-H484, A-H4, and A-H2 are surface-mount units. The A-H4D is an in-wall Decora® style unit.
3. **Power Supply**: The power supply plugs into the Hub. The Russound® A-PS 24VDC/2.5A unit is an example.

A-H4D OVERVIEW

The A-H4D is an A-BUS® in-wall, 4-zone, 1-source Audio Distribution Hub used with A-BUS® Amplified Control Modules. The A-H4D can accomodate 4 additional Amplified Control Modules when used with the A-H4Dx Expansion Hub, which plugs into the side of the A-H4D.

IMPORTANT – Before installation, review the manuals included with each component in your system. If you are unsure of any of the installation procedures described herein or elsewhere, consult a professional electronics installer.

A-H4D KEY FEATURES

1) 1 source audio input and loop output
2) 4 common IR outputs
3) Status power input with selector jumper (on rear)
4) Power input
5) Link In and Out
6) Plug-in connection for A-H4Dx Expansion Hub
6) Decora® faceplate (2-gang)
7) Front-panel connections for Audio, IR Emitters, Power, and Status

A-H4D SPECIFICATIONS

Power Supply:	A-PS. 24VDC/2.5A.
Status Power:	12VDC/100mA.
Keypad Connection:	CAT-5, 110 Punchdowns
Link Connection:	CAT-5, 110 Punchdowns
Expansion Connection:	8-pin female connector
Emitter Connections:	1/8" Male. Tip (+), sleeve (–)
Dimensions:	3.54"W x 2.91"H x 1.456"D (90x74x37mm)
Weight:	8 oz. (226g)